31. An isolated DNA sequence complementary to the DNA sequence encoding mammalian GDF-1 protein having the nucleotide sequence defined in Figure 2 or Figure 11A or Figure 11B at hybridization conditions of 68°C and 1M sodium chloride and which remains bound when subjected to washing at 68°C with 15 mM sodium chloride/1.5 mM sodium citrate.--

REMARKS

The Examiner's attention is directed to the accompanying petition submitted under 37 C.F.R. 1.103(a); the petition request suspension of action in the present application. A decision on this petition is requested prior to examination and issuance of a first Office Action. If the declaration has not reached the Examiner when this application is taken up for examination, she is invited to contact the undersigned.

Claims 3, 11-15, 22 and 24-31 are pending. Claim 23 was canceled without prejudice as the claimed subject matter will be prosecuted in a separate application. New claims 24-31 are directed to the native DNA sequence of the mammalian GDF-1 gene and its uses as a hybridization probe.

The amendments to the claims find support throughout the original disclosure and, thus, do not introduce new matter. See, in particular, pages 9-10 of the specification.

Claims 3, 11-15 and 22 were rejected under 35 U.S.C. 112, first paragraph, as allegedly indefinite. Applicant traverses. Contrary to the statement on page 2 of the Office Action (Paper No. 34), applicant has not admitted that "the description of recombinant production of GDF-1 in the specification and the description of Figure 9 is insufficient". In fact, pages 11-12 of the specification describes vectors and host cells used in production of recombinant GDF-1, and Figure 9 shows cell-free production of recombinant GDF-1. Applicant submits that such provides support in the specification for how the invention is made and used. The withdrawal in the pending Office Action of the portion of the enablement rejection directed to the specification teaching how the claimed invention is made is indicative that the specification provides such an enabling disclosure.

With respect to the objection that the specification does not teach how the claimed invention is used, applicant submits that the arguments made in the previous response and maintained here are sufficient disclosure to be enabling. In particular, applicant has not attempted "to add statements of usefulness to the disclosure of the application as filed", page 5 of the Office Action (Paper No. 34). Instead, the use of GDF-1 as a lineage marker as shown in the specification establishes that the skilled artisan could use the claimed

invention, either by hybridization or by detection of GDF-1 protein.

Although applicant maintains that this is sufficient to overcome the Examiner's objection to the specification, a declaration is being prepared to further prosecution in the present application. As discussed in the petition, suspension is requested to allow applicant time to prepare a declaration containing evidence responsive to the pending enablement rejection. Such declaration evidence should be further considered as a response to the pending enablement rejection.

Claims 3, 11-15 and 22 were rejected under 35 U.S.C. 112, second paragraph, as allegedly indefinite. Applicant traverses. It is clear that the GDF-1 protein is being claimed and that the second, upstream open reading frame shown in Figures 2, 11A and 11B is UOG-1 (see Examples 7 and 8, and page 15, lines 16-18 of the disclosure). Thus, the amino acid sequence of the downstream open reading frame is the claimed GDF-1 protein.

Finally, it is noted that the Hoben et al. reference supports the use of GDF-1 as a lineage marker because of its expression "primarily in the nervous system". Further, the cited abstract does not support the Examiner's allegation that "biological activity, and assays therefore, for GDF-1 had not been determined at the time of invention" (page 5 of the Office Action, Paper No. 34). Instead the abstract describes

further characterization of GDF-1 and studies showing that recombinant GDF-1 "stimulates the expression of the immediate early genes in neural cell lines". Thus, one would not conclude from the abstract that GDF-1 does not have a biological activity or that such activities as disclosed in the present application are incredible.

A favorable action on the merits is earnestly requested. If any further information is required, the Examiner is invited to contact the undersigned.

Respectfully submitted,

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